

PANIMALAR INSTITUTE OF TECHNOLOGY
Department of Computer Science and Engineering Academic
Year: 2019 - 2020 (Odd Semester)

Degree, Semester & Branch : V Semester B.E. Computer Science and Engineering
Course(Subject) Code & Title : OMD 553- TELEHEALTH TECHNOLOGY
Name of the Faculty member : Mrs. K. Hema Priya, AP / CSE
Date : 3-10-19

Innovative Practice: Technical Connection Game

Topics: UNIT – 5 Application Areas in Telemedicine

Use of Technical Connection Game:

- It helps students to think identify the technical terminologies in the subject and recollect the definition of the technical terms.
- It motivates the students to build oral communication skills.
- It helps focus attention and engage students actively in the technical connection game.

Procedure of this Technical connection game:

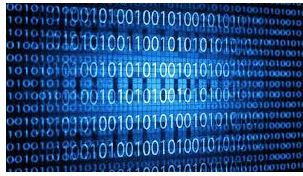
- Decide upon the text or topics to be covered and identify the technical terms in that topics.
- Populate with a set of images relevant to the words (terms) that should be identified. Each term can be identified with a set of images.
- The students should identify the images and connect those words to find the technical term.
- Students can form groups and participate. Provide the guidelines for discussion
- Once the team identifies the topic, an individual should share the points relevant to the technical term after discussing within their team.

Activity:

- The images are provided in the Power point slides and display. The students can discuss in their team and come out with the actual technical terms.
- After identifying the technical word, each team is given 1 min to discuss about the definition and related content on that technical word and share it to all the students

Connection questions:

1) It is a standard



Ans: Digital Imaging and Communications in Medicine

30

2) It is one of the sign of patient health information



Ans: ElectroCardioGram (ECG)

32

3) It is one of the surgery equipment

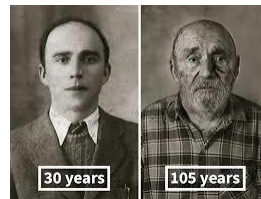
DAA



Ans: Da Vinci

34

4) It is one of the wired telecommunication technology



Ans: Plain Old Telephone System (POTS)

36

5) It is one of the major application area of Telemedicine



Ans: TeleCardiology

36

I. Tick the correct option. There is only ONE correct answer for each question. Each Correct Answer carries 1 mark. Overwriting will make the answer invalid

1. **Telemedicine allows hospitals to optimize the use of their personnel by**
 - a. Outsourcing all Possible Work
 - b. Allowing Outside Specialists to View Patient X-Rays
 - c. Allowing Them to Take More Vacation Days
 - d. **Cross Training Doctors, Nurses and Maintenance Workers**

2. **Which of the following situations is not considered part of telemedicine?**
 - a. Videoconferencing
 - b. **Remote Monitoring of Vital Signs**
 - c. Transmission of Still Images
 - d. Word Processing

3. **Medical related images and simulations available to educate patients is an example of**
 - a. Videoconferencing
 - b. Nursing Call Centres
 - c. **Continuing Medical Education**
 - d. Remote Monitoring of Vital Signs

4. **What is the most significant reason that telehealth is important for consumers (patients) of home care nursing?**
 - a. **No driving**
 - b. Real time interpretation of healthcare status for healthcare management
 - c. The nurse never has to make a visit
 - d. None of these

5. **The IEEE Standard for WBAN is**
 - a. IEEE 802.11
 - b. **IEEE 802.15.6**
 - c. IEEE 802.13
 - d. None of these
6. **How many number of B and D channels are used in BRI and PRI?**
 - a. 2B+1D and 23B+1D
 - b. 23B+2D and 2B+1D
 - c. **2B+1D and 23B+2D**
 - d. 23B+1D and 2B+1D
7. **HL7 is a set of standards for transferring clinical and Administrative Data b/w HIS. Which one is not a type of Terrestrial Telehealth Communication Channels**
 - a. POTS
 - b. **ISDN**
 - c. GPRS
 - d. Leased Lines
8. **Prevention of excessive blood loss is important for**
 - a. Preserving patient's oxygen-carrying capacity
 - b. **Increased visibility**
 - c. To prevent formation of hematomas
 - d. All of the above
9. _____ **is technologically dependent surgery comprising of computerized designed instruments with microprocessor controlled safety features**
 - a. Davinci
 - b. Laparoscopy
 - c. **Robotic Surgery**
 - d. Hemostasis
10. **Which of the following contributes to likely markets for telehealth**
 - a. Intensity of needed monitoring for a disease state
 - b. **New or limited access to settings of care**
 - c. Visual-oriented specialty care
 - d. All of the above
11. **What does DICOM stand for?**
 - a. Dosage, imaging, and collection methods
 - b. Descriptions of Images and communications methods
 - c. **Digital Imaging and Communications in Medicine**
 - d. None of the above
12. **Non-real-time data, includes**
 - a. vital sign signals
 - b. **radiological images with DICOM 3.0, file,**
 - c. bio-signal, bio-data
 - d. all of the above
13. **Which MAC scheme is widely used in Telemedicine.**
 - a. SDMA
 - b. **FDMA**
 - c. TDMA
 - d. CDMA
14. ----- **is an online healthcare marketplace**
 - a. SeeDoc
 - b. **Practo**
 - c. Portea
 - d. Credihealth
15. **A form of telehealth technology in which clinical data or images are captured at one point in time and used at a later time is**
 - a. Batch
 - b. Real time
 - c. **Store and forward**
 - d. Synchronous

16. A device that converts audio and video signals into digital form is a
- CODEC
 - Digital image acquisition device
 - MODEM**
 - Telephone
17. Which of the following provides a protocol for exchange of data between a medical device and a health information system
- Advanced Medical Technology Association (AdvaMed)
 - Health Level Seven (HL7)
 - International Telecommunications Union (ITU)
 - Office for the Advancement of Telehealth (OAT)**
18. What service may commonly provide communication across the “last mile” in a telehealth encounter
- Bluetooth
 - Plain old telephone service (POTS)**
 - Ultra wide band (UWB)
 - Wi-Fi
19. Which of the following is a significant benefit of telehealth?
- Avoidance of transportation costs
 - Documentation requirements**
 - Food and Drug Administration approval of devices
 - Privacy of home visits
20. Asynchronous telehealth is defined as
- Real-time interaction**
 - Delayed interaction
 - Both a) and b)
 - Neither a) nor b)
21. A telephone call is an example of which type of telehealth
- Synchronous
 - Asynchronous**
 - “Store and Forward”
 - None of the above
22. Health workers in remote areas of the world can communicate with specialists using webcams and
- Electrocardiograms
 - Satellites
 - Network Security Systems**
 - Fiber Optics
23. Pan-African e-Network Project utilizes which infrastructure?
- PSAT
 - VSAT**
 - GSLV
 - ALOHA
24. In the context of video consultation, the upload speed refers to:
- Speed at which data is transmitted
 - Speed at which data is acquired**
 - Both a) and b)
 - Neither a) nor b)
25. In which of the following does the care of the patient remain the responsibility of the primary care provider
- Medical tourism event**
 - Remote encounter by specialist
 - Telehealth consultation
 - Use of personal diagnostics